

WHAT IS CLAIMED IS:

- 1 1. An intraluminal stent comprising:
5 a generally elongate tubular body formed of an
8 elongate helically wound wire, the wire being formed into
 successive waves along the length of the wire, the waves
 being arranged in non-overlapping longitudinally spaced
 succession along the length of said tube, the longitudinal
 spacing of the helical windings being less than twice the
 amplitude of the wave.
- 1 2. An intraluminal stent of claim 1 wherein
3 longitudinally adjacent ones of said waves are
 longitudinally nested along the length of said tubular body.
- 1 3. An intraluminal stent of claim 2 wherein said
3 longitudinally nested waves define peaks which are linearly
 aligned.
- 1 4. An intraluminal stent of claim 1 wherein said
3 longitudinal spacing of the helical windings is less than
 the amplitude of the wave.
- 1 5. An intraluminal stent of claim 1 wherein said
5 stent includes said wire being helically wound in non-
7 overlapping disposition and wherein said wire defines an
 open area between said helically wound wire and wherein said
 percentage of open surface area of said stent in
 relationship to the total surface area of said stent is less
 than 30% in the closed condition.
- 1 6. An intraluminal stent of claim 1 wherein said
2 tubular body is uniformly flexible along the length thereof.
- 1 7. An intraluminal stent of claim 6 wherein said
3 stent is radially expandable after intraluminal
 implantation.

1 8. A radially expandable generally tubular
endoluminal implantable prosthesis comprising:

5 a wire which is wound in a helical configuration
to define a generally elongate tubular body, the wire
including successively formed waves along the length of said
7 wire, each wire wave being non-overlappingly nested within
the wave formed longitudinally thereadjacent.

1 9. A prosthesis of claim 8 wherein said wire waves
are of generally uniform configuration defining a peak-to-
3 peak amplitude of a preselected first dimension.

1 10. A prosthesis of claim 9 wherein said
longitudinally adjacent wire waves are spaced apart a
4 preselected second dimension which is less than the
preselected first dimension.

1 11. A prosthesis of claim 10 wherein said wire has a
given wire diameter and wherein said wound wire defines a
generally cylindrical outer surface having solid portions
5 formed by said wire and open portions formed between said
wound wire.

1 12. A prosthesis of claim 11 wherein said generally
cylindrical outer surface defines a total surface area
including an open surface and a wire surface and wherein
said non-expanded wire surface substantially exceeds said
5 open surface.

1 13. A prosthesis of claim 12 wherein said open surface
2 area is less than 30% of said total surface area.

1 14. An intraluminal stent comprising:
an elongate tubular body formed of a single wound
wire;

5 said wire having a wave-like pattern defining a
plurality of waves formed along the length of said wire,
each said wave defining a leg segment between wave peaks,
each leg segment being of a length different from the next
8 adjacent leg segment.

1 15. An intraluminal stent of claim 14 wherein said
wire is wound about a central axis forming said tubular
3 body.

1 16. An intraluminal stent of claim 15 wherein tubular
body includes longitudinally successive waves along the
length thereof, each said wave being nested within the wave
4 formed longitudinally thereadjacent.

1 17. An intraluminal stent of claim 14 wherein each
2 wave is defined by a peak and a pair of wave leg segments
3 extending from said peak.

1 18. An intraluminal stent of claim 17 wherein one of
2 said wave leg segments of said pair has a length greater
3 than the other wave leg segment of said pair.